

Background

Any measurement has an uncertainty associated with it. In order to compare the results of one measurement with another, or to demonstrate that an artefact meets a given specification, it is essential to make an analysis of the magnitude of the measurement uncertainty. Typically it is necessary to prepare an 'uncertainty budget', which identifies the individual effects which contribute to the overall uncertainty. Recommendations on the methods to be used for evaluation and combination of these component uncertainties in radiometric and photometric measurements are being considered by CIE TC 2-43, with an initial emphasis on photometric measurements. The first part of this symposium will present the progress which has been made so far within TC 2-43, in order to provide guidance to those working in the area of photometric measurements. More complex issues, for example correlations within spectral data, will be addressed during the second part of the symposium.

The goals

The goals of the meeting are to:

- *Provide guidance on techniques for the evaluation of photometric uncertainties;*
- *Present the latest developments relating to methods for assessment of uncertainties for quantities which are derived from spectral measurements;*
- *Provide a forum for discussion of related effects such as correlation of data.*

First Announcement

CIE Expert Symposium on UNCERTAINTY EVALUATION Tutorial and Workshop

Methods for analysis of uncertainties in optical radiation measurement

22 - 24 January 2001

CIE Central Bureau, Vienna

AUSTRIA

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Kegelgasse 27
A-1030 Vienna
AUSTRIA
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Who should attend

This meeting is open to all participants, but prior registration is required. The following individuals are specifically encouraged to attend:

- *Scientists, engineers and technicians whose work involves optical radiation measurements, particularly photometric measurements;*
- *Those working on optical radiation metrology at research laboratories and National Measurement Institutes.*

Symposium Agenda

The meeting is split into 2 parts; participants can attend either or both parts. The first part includes tutorial presentations given by experts from CIE Division 2 "*Physical Measurement of Light and Radiation*", together with opportunities for round-table discussions and demonstrations. The second part is a Workshop with Invited Papers relating to the evaluation of uncertainties for optical radiation measurements and an extended discussion session on the issues raised. It is anticipated that this Workshop will aid towards the future development of best practice guidelines in this area.

The Tutorial Sessions will cover fundamentals for uncertainty evaluation, particularly for photometry:

- Fundamentals of uncertainty analysis, including evaluation of standard uncertainty for repeated measurements, degrees of freedom and expanded uncertainty
- Development of a measurement equation for photometric measurements and its use in uncertainty evaluation
- Practical examples
- Introduction to the work of CIE TC 2-43

The Workshop Sessions will cover recent work related to uncertainty evaluation for optical radiation measurements:

- Correlations and interdependencies between data
- Uncertainties for spectrally-integrated measurements
- Uncertainties for detector-based measurements
- Key comparisons and the development of a database for international measurement capabilities

Registration

Registrations are accepted for

- Uncertainty tutorial, 22 - 23 January 2001.
Registration fee: US\$ 300,-
- Uncertainty workshop, 23 - 24 January 2001.
Registration fee: US\$ 100,-

For participants of both parts a reduced registration fee of US\$ 350,- holds.

*Deadline for registration is 20 December 2000,
Registration fee to be sent to the CIE Central Bureau
Bank Account: 04610-665-450 at BAWAG
Landstraßer Hauptstraße 60, A-1030 Vienna, Austria.
VISA, Master Card, American Express credit card also
honoured.*

Preliminary registration

Please return this registration card to receive more information.

I wish to attend the

CIE Uncertainty Tutorial 2001

CIE Uncertainty Workshop 2001

☐☐

Name:

(please print)

Occupation / Title:

Mailing address:

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City: Code:

Country:

Telephone: (.....)

Fax: (.....)

E-Mail:

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